

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/524,359
Source: PG/10
Date Processed by STIC: 2/24/05

ENTERED



PCT

RAW SEQUENCE LISTING

DATE: 02/24/2005

PATENT APPLICATION: US/10/524,359

TIME: 12:01:52

Input Set : A:\2891-1-001PCTUS - Sequence Listing.TXT

Output Set: N:\CRF4\02242005\J524359.raw

```

4 <110> APPLICANT: Chabot, Benoit
5     Villemaire, Jonathan
6     Elela, Sherif Abou
7     Nasim, Faiz-ul Hassan
9 <120> TITLE OF INVENTION: Methods to reprogram splice site
10     selection in pre-messenger RNAs
13 <130> FILE REFERENCE: 2891-1-001PCT/US
C--> 15 <140> CURRENT APPLICATION NUMBER: US/10/524,359
C--> 16 <141> CURRENT FILING DATE: 2005-02-14
18 <150> PRIOR APPLICATION NUMBER: US60/402,765
19 <151> PRIOR FILING DATE: 2002-08-12
21 <160> NUMBER OF SEQ ID NOS: 33
23 <170> SOFTWARE: FastSEQ for Windows Version 4.0
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 18
27 <212> TYPE: DNA
28 <213> ORGANISM: Artificial Sequence
30 <220> FEATURE:
31 <223> OTHER INFORMATION: extension of the oligonucleotide-protein conjugate
33 <400> SEQUENCE: 1
34 cguacacgau caggguaac                                     18
36 <210> SEQ ID NO: 2
37 <211> LENGTH: 18
38 <212> TYPE: DNA
39 <213> ORGANISM: Artificial Sequence
41 <220> FEATURE:
42 <223> OTHER INFORMATION: +7 to -11 proximal 5' splice site
44 <400> SEQUENCE: 2
45 uaccuaccac uaccaccg                                     18
47 <210> SEQ ID NO: 3
48 <211> LENGTH: 18
49 <212> TYPE: DNA
50 <213> ORGANISM: Artificial Sequence
52 <220> FEATURE:
53 <223> OTHER INFORMATION: -26 to -43 proximal 5' splice site
55 <400> SEQUENCE: 3
56 ccuccuccgu uguuauag                                     18
58 <210> SEQ ID NO: 4
59 <211> LENGTH: 20
60 <212> TYPE: DNA
61 <213> ORGANISM: Artificial Sequence
63 <220> FEATURE:
64 <223> OTHER INFORMATION: -4 to -23 proximal 5' splice site

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66 <400> SEQUENCE: 4
67 uaccaccgcc aaagccgccu 20
69 <210> SEQ ID NO: 5
70 <211> LENGTH: 16
71 <212> TYPE: DNA
72 <213> ORGANISM: Artificial Sequence
74 <220> FEATURE:
75 <223> OTHER INFORMATION: hnRNP A1 binding site of C5-M4A1 oligonucleotide
77 <400> SEQUENCE: 5
78 tttttgatag ggaaat 16
80 <210> SEQ ID NO: 6
81 <211> LENGTH: 16
82 <212> TYPE: DNA
83 <213> ORGANISM: Artificial Sequence
85 <220> FEATURE:
86 <223> OTHER INFORMATION: C5-M4CT oligonucleotide
88 <400> SEQUENCE: 6
89 gatcacttgt gtcaac 16
91 <210> SEQ ID NO: 7
92 <211> LENGTH: 20
93 <212> TYPE: DNA
94 <213> ORGANISM: Artificial Sequence
96 <220> FEATURE:
97 <223> OTHER INFORMATION: hnRNP A1 bonding sites of C5-M4A1W oligonucleotide
99 <400> SEQUENCE: 7
100 uaugauaggg acuuagggug 20
102 <210> SEQ ID NO: 8
103 <211> LENGTH: 20
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial Sequence
107 <220> FEATURE:
108 <223> OTHER INFORMATION: mutated hnRNP A1 binding sites of C5-M4A1M
109 oligonucleotide
111 <400> SEQUENCE: 8
112 uaugauacgc acuuacgcug 20
114 <210> SEQ ID NO: 9
115 <211> LENGTH: 20
116 <212> TYPE: DNA
117 <213> ORGANISM: Artificial Sequence
119 <220> FEATURE:
120 <223> OTHER INFORMATION: +7 to -13 proximal 5' splice site
122 <400> SEQUENCE: 9
123 uucuuaccca gccgccguuc 20
125 <210> SEQ ID NO: 10
126 <211> LENGTH: 20
127 <212> TYPE: DNA
128 <213> ORGANISM: Artificial Sequence
130 <220> FEATURE:
131 <223> OTHER INFORMATION: -4 to -23 proximal 5' splice site

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133 <400> SEQUENCE: 10
134 gccgccguuc uccuggaucc 20
136 <210> SEQ ID NO: 11
137 <211> LENGTH: 16
138 <212> TYPE: DNA
139 <213> ORGANISM: Artificial Sequence
141 <220> FEATURE:
142 <223> OTHER INFORMATION: hnRNP A1 binding site of X-M4A1 oligonucleotide
144 <400> SEQUENCE: 11
145 tttttgatag ggaaat 16
147 <210> SEQ ID NO: 12
148 <211> LENGTH: 20
149 <212> TYPE: DNA
150 <213> ORGANISM: Artificial Sequence
152 <220> FEATURE:
153 <223> OTHER INFORMATION: hnRNP A1 binding sites of X-M4A1W oligonucleotide
155 <400> SEQUENCE: 12
156 uaugauaggg acuuagggug 20
158 <210> SEQ ID NO: 13
159 <211> LENGTH: 20
160 <212> TYPE: DNA
161 <213> ORGANISM: Artificial Sequence
163 <220> FEATURE:
164 <223> OTHER INFORMATION: mutated hnRNP A1 binding sites of X-M4A1M
165 oligonucleotide
167 <400> SEQUENCE: 13
168 uaugauacgc acuuacgcug 20
170 <210> SEQ ID NO: 14
171 <211> LENGTH: 18
172 <212> TYPE: DNA
173 <213> ORGANISM: Artificial Sequence
175 <220> FEATURE:
176 <223> OTHER INFORMATION: control RNA sequence
178 <400> SEQUENCE: 14
179 aaugucugcu acuggaag 18
181 <210> SEQ ID NO: 15
182 <211> LENGTH: 20
183 <212> TYPE: DNA
184 <213> ORGANISM: Artificial Sequence
186 <220> FEATURE:
187 <223> OTHER INFORMATION: E-Ad primer
189 <400> SEQUENCE: 15
190 gagtttgtcc tcaaccgcga 20
192 <210> SEQ ID NO: 16
193 <211> LENGTH: 20
194 <212> TYPE: DNA
195 <213> ORGANISM: Artificial Sequence
197 <220> FEATURE:
198 <223> OTHER INFORMATION: BclX3 primer

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200 <400> SEQUENCE: 16
201 tcggtctgctg cattgttccc                                20
203 <210> SEQ ID NO: 17
204 <211> LENGTH: 21
205 <212> TYPE: DNA
206 <213> ORGANISM: Artificial Sequence
208 <220> FEATURE:
209 <223> OTHER INFORMATION: T3-5' primer
211 <400> SEQUENCE: 17
212 gggaacaaaa gctgggtacc g                                21
214 <210> SEQ ID NO: 18
215 <211> LENGTH: 40
216 <212> TYPE: DNA
217 <213> ORGANISM: Artificial Sequence
219 <220> FEATURE:
220 <223> OTHER INFORMATION: UA oligonucleotide
222 <400> SEQUENCE: 18
223 ggguaacuuu agaguaggcc cgcugcguga guauccguga            40
225 <210> SEQ ID NO: 19
226 <211> LENGTH: 40
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
231 <223> OTHER INFORMATION: UB oligonucleotide
233 <400> SEQUENCE: 19
234 ggguaacuuu agaguaggcc ucggcuuggu guucuuucag            40
236 <210> SEQ ID NO: 20
237 <211> LENGTH: 40
238 <212> TYPE: DNA
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: UOA oligonucleotide
244 <400> SEQUENCE: 20
245 cgcugcguga guauccguga ggguaacuuu agaguaggcc            40
247 <210> SEQ ID NO: 21
248 <211> LENGTH: 40
249 <212> TYPE: DNA
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: UOB oligonucleotide
255 <400> SEQUENCE: 21
256 gcggcuuggu guucuuucag ggguaacuuu agaguaggcc            40
258 <210> SEQ ID NO: 22
259 <211> LENGTH: 40
260 <212> TYPE: DNA
261 <213> ORGANISM: Artificial Sequence
263 <220> FEATURE:
264 <223> OTHER INFORMATION: UB1 oligonucleotide
266 <400> SEQUENCE: 22

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267 ggguaaccuuu agaguaggcc ugauucucgc ugucagaggc      40
269 <210> SEQ ID NO: 23
270 <211> LENGTH: 40
271 <212> TYPE: DNA
272 <213> ORGANISM: Artificial Sequence
274 <220> FEATURE:
275 <223> OTHER INFORMATION: UB2 oligonucleotide
277 <400> SEQUENCE: 23
278 gauuccucug cuggccagga ggguaaccuuu agaguaggcc      40
280 <210> SEQ ID NO: 24
281 <211> LENGTH: 43
282 <212> TYPE: DNA
283 <213> ORGANISM: Artificial Sequence
285 <220> FEATURE:
286 <223> OTHER INFORMATION: UBn oligonucleotide
288 <400> SEQUENCE: 24
289 guucgaucuc gaaacgaagg cguacggcuu gguguucuuu cag      43
291 <210> SEQ ID NO: 25
292 <211> LENGTH: 40
293 <212> TYPE: DNA
294 <213> ORGANISM: Artificial Sequence
296 <220> FEATURE:
297 <223> OTHER INFORMATION: Da oligonucleotide
299 <400> SEQUENCE: 25
300 gacgugcagg ucaagcuuga ggguaaccuuu agaguaggcc      40
302 <210> SEQ ID NO: 26
303 <211> LENGTH: 40
304 <212> TYPE: DNA
305 <213> ORGANISM: Artificial Sequence
307 <220> FEATURE:
308 <223> OTHER INFORMATION: Db oligonucleotide
310 <400> SEQUENCE: 26
311 cucugggcca gguaaagggc ggguaaccuuu agaguaggcc      40
313 <210> SEQ ID NO: 27
314 <211> LENGTH: 40
315 <212> TYPE: DNA
316 <213> ORGANISM: Artificial Sequence
318 <220> FEATURE:
319 <223> OTHER INFORMATION: UST oligonucleotide
321 <400> SEQUENCE: 27
322 ggguaaccuuu agaguaggcc uccuguccac cagggcugca      40
324 <210> SEQ ID NO: 28
325 <211> LENGTH: 45
326 <212> TYPE: DNA
327 <213> ORGANISM: Artificial Sequence
329 <220> FEATURE:
330 <223> OTHER INFORMATION: USn oligonucleotide
332 <400> SEQUENCE: 28
333 guucgaucuc gaaacgaagg cguagcuguc caccagggcu gcacc      45

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VERIFICATION SUMMARY

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L:15 M:270 C: Current Application Number differs, Replaced Current Application Number

L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date